

CLAIMS

1. An additive for a printing ink comprising a polyethylene-based wax specified by the following (i) to
5 (vii):

(i) being an ethylene homopolymer or a copolymer of ethylene and at least one α -olefin selected from α -olefins having 3 to 20 carbon atoms,

10 (ii) having the intrinsic viscosity $[\eta]$ determined in decalin at 135°C ranging from 0.06 to 0.35 dl/g,

(iii) having the ratio (Mw/Mn) of weight average molecular weight (Mw) to number average molecular weight (Mn) determined by gel permeation chromatography (GPC) ranging from 1.7 to 3.2,

15 (iv) having the ratio (Mz/Mw) of z-average molecular weight (Mz) to weight average molecular weight (Mw) determined by gel permeation chromatography (GPC) ranging from 1.5 to 2.0,

(v) having the density ranging from 920 to 980 kg/m³,

20 (vi) having the penetration hardness of 5 dmm or less, and

(vii) having the acid value ranging from 0.3 to 9.9 KOH-mg/g.

2. The additive for a printing ink according to claim 1, wherein a polyethylene-based wax is obtained by oxidative modification of the polyethylene-based wax which is produced with a metallocene-based catalyst.

5

3. A solvent dispersion for a printing ink, wherein the polyethylene-based wax according to claim 1 is dispersed in the form of fine particles having a volume average particle diameter ranging from 0.3 to 10 μm and at a ratio of 5 to 50 wt.% in a non-aromatic solvent.

10

4. The solvent dispersion for a printing ink according to claim 3, wherein the non-aromatic solvent contains an alcohol-based solvent and/or an ester-based solvent at a ratio of 10 wt.% or more.

15

5. A printing ink in which the polyethylene-based wax according to claim 1 is contained in the form of fine particles having a volume average particle diameter ranging from 0.3 to 10 μm and at a ratio of 0.1 to 10 wt.%, and the content of an aromatic solvent is less than 5 wt.%.

20